Organization

The US Army Product Manager, Force Protection Systems (PM-FPS), is the Army Materiel Developer for Force Protection Systems. PM-FPS is a product management organization under the Joint Program Executive Office, Chemical and Biological Defense (JPEO-CBD).

Mission

Provide cost-effective, state-of-the-art, and logistically supportable physical security and force protection systems to installations and tactical forces deployed worldwide.

Program Management

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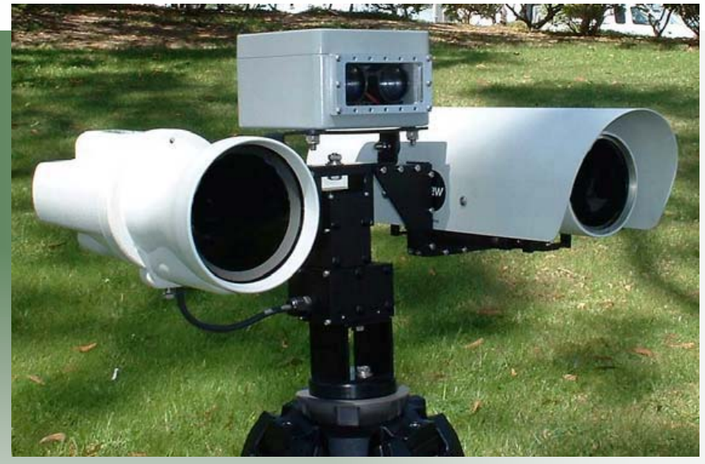
March 2005

TVSS

Tactical Video Surveillance System

Tactical Force Protection Technology Enhancement

The TVSS is a compact, modular, video surveillance, and warning system with motion detection activation and enhanced assessment capability. The major objective for TVSS is to improve the local area security and protection of individuals and units with quick set-up, high reliability, and operator selected mission dependent configurations. The system is lightweight, man-portable, quickly and easily emplaced, and simple to operate. The TVSS may be used as a tactical stand-alone system or as a supplemental device for use with other security systems. The TVSS is designed to be employed by the dismounted soldier to warn of hostile individuals, either dismounted or in vehicles, intruding into areas designated for security purposes.

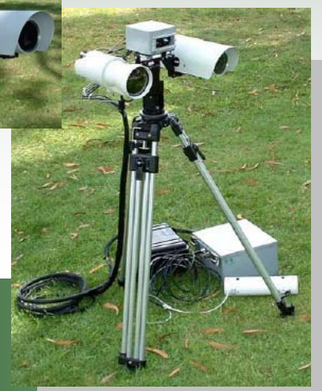


The TVSS will provide early detection and warning in order to enhance force effectiveness and increase situational awareness during all types of combat operations or missions ranging from small scale contingencies up to high intensity combat. In all scenarios or environments, the TVSS will provide the individual, team, or unit leader the increased ability to monitor more terrain, for a longer period of time, with fewer personnel resources. Using the system as a part of an integrated, large, in-depth, layered situational awareness concept will further enhance force protection.

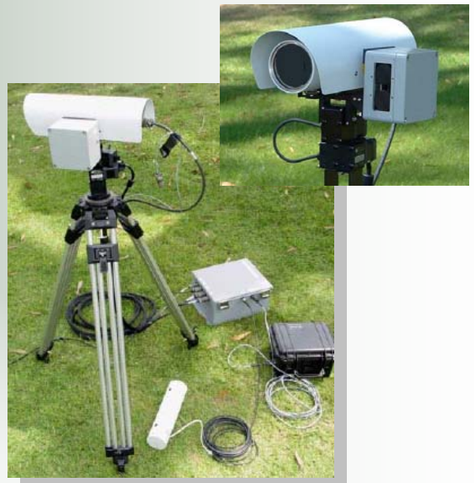
Video Surveillance & Early Warning

TVSS Operational Overview

Tactical forces require supplemental warning devices with programmable notification capabilities in support of the Battlefield Operating System. The deployment scenarios include two major security missions, integrated perimeter (emplaced) security and tactical force protection.



Enhanced Camera System



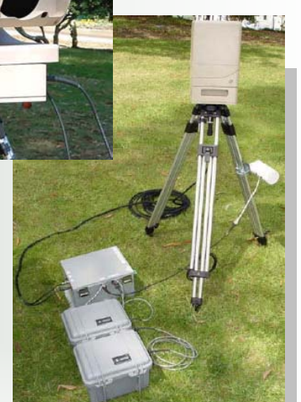
Basic Camera System

Mobility Function Enhancement

The TVSS will facilitate movement on routes (with secure, manned traffic control points and check points) and preparation and emplacement of constructed obstacles.

Survivability Function Enhancement

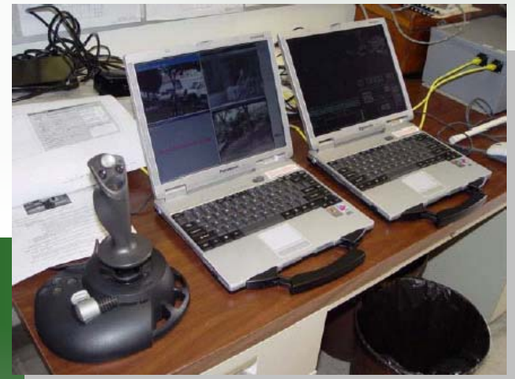
The TVSS will enhance the protection of individuals and systems from combat area hazards (with prepared and protected positions), OPSEC (physical security), and the conduct of deception in support of tactical operations and maintenance of counter-reconnaissance and security readiness (by providing security for tactical formations within perimeters); provide counter-reconnaissance with early warning of incursions, augment law and order (by performing law enforcement activities such as security of both temporary and permanent facilities to include protection of personnel and facilities from terrorist activities) and the conduct of internment and resettlement (for improving the security of facilities for enemy prisoners of war, civilian internees, US military prisoners, and dislocated civilians).



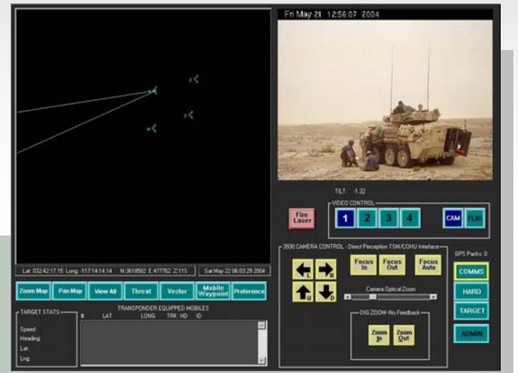
Sentry Camera System

TVSS System Configuration

The TVSS will consist of three major sub-systems: (1) remote camera(s) with pan/tilt/zoom capability, mounting hardware, power supply, video transmitter, and control/command receiver; (2) remote command station(s) with control/command transmitter video receiver(s) and power supply; and (3) monitoring point with quad video screen monitors, video monitoring software and controls, video recording capability, and power supply. Supplemental characteristics shall include signal encryption/decryption, retransmission and relay capability, and a variety of camera and lens configurations/capabilities.



Monitoring Point



Monitoring Point Display

Characteristics/Performance

- Motion detection activation
- Detection range: individual – 1km
  vehicle – 2.5km
- Camera to monitoring point wireless range – 1500m or greater
- Color and thermal imaging
- Range determination capability to 2.5km
- Range determination accuracy +/- 10m
- Modular design
- Complete camera system weight -less than 20kg
- Continuous 24-hour video surveillance
- Ability to deploy individually or in multiples

Special Features

- Open architecture
- Man-portable system
- Remote monitoring point
- Weatherproof
- Anti-tamper capability
- Carrying case with accessories